Assignment #4 - Content Providers

Introduction

The assignment consisted of changing the previous apps so they no longer access the database in the UI thread.

Development

The student got all the icons used in the project from the website The Noun Project and all the icons belong to the collection Material Design - Rounded Corners Collection from the artist Tim Neumann. The full list of icons and credits can be found on the file credits.txt, in the root folder.

All the steps given in the assignment were followed and the podcasts provided by the professor were used as guidelines for project organization (packaged and classes' names conventions). The.

One correction made in this assignment was related to the foreign keys in the database. In assignment #3, when the a Book is deleted, the authors related to that book are not, even the Authors table having a "delete on cascade" and the command `"PRAGMA foreign_keys=ON;"` having being used during the database creation. After some research, it was found that that command should be executed every time a connection database is opened. The line `db.execSQL("PRAGMA foreign_keys=ON;");` was added to the method `onOpen` of the class DBHelper (SQLOpenHelper derivate class).

Conclusion

The student could observe how better sql asynchronous operations are just by debugging the app. The screens load faster and app runs smoothly.

These are the lists for the APK files locations:
- *BookstoreWithEntityManager\app\build\outputs\apk*
- *BookstoreWithContentProvider\app\build\outputs\apk*
- *ChatServerWithContentProvider\app\build\outputs\apk*
- *Chat-Client-Oneway\app\build\outputs\apk*

The bookstore video is available at the root folder ***bookstore.swf***. Since both BookstoreWithContentProvider and BookstoreWithEntityManager have the same screens and behaviors, only one video was recorded and the application running is the BookstoreWithEntityManager.

The ChatServerWithContentProvider is available at the root folder with the name of ***chatserver.swf***.